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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/030,711	04/22/2002	Kazumi Iijima	KKH-013	8628

7590

02/11/2004

Rader, Fishman & Grauer
1233 20th Street N W Suite 501
Washington, DC 20036

EXAMINER

DESANTO, MATTHEW F

ART UNIT	PAPER NUMBER
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3763

DATE MAILED: 02/11/2004

17

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/030,711

Applicant(s)

IJIMA ET AL.

Examiner

Matthew F DeSanto

Art Unit

3763

JA

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Minkus et al. (USPN 5460617).

Minkus et al. discloses a plunger with a screw portion, a pair of ring members (34,48), and a plurality of vane members (42,44), a flange with a rib (58) in between the first ring and the flange. (Figures 1-3 and entire reference)

3. Claims 1, 2, and 4 are rejected under 35 U.S.C. 102(e) as being anticipated by Kimber et al. (USPN 6,068,614).

Kimber et al. discloses a plunger with a screw portion; a pair of ring members, and a plurality of vane members, as well as a flange portion and one or two gripping ring members. (Figure 7 and entire reference)

4. Claims 1, 2, and 4 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Hirschman et al. (USPN 6042565).

Hirschman et al. discloses a plunger with a screw portion; a pair of ring members, and a plurality of vane members, as well as a flange portion and one or two gripping ring members. (Figures 1, 2A, 2C, 2D, 4A, and entire reference)

5. Claims 1, and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Shanley et al. (USPN 5,685,864).

Shanley et al. discloses a plunger with a screw portion, a pair of ring members, and a plurality of vane members, a flange with a rib in between the first ring and the flange. (Figures 1-3 and entire reference)

Claim Rejections - 35 USC § 102 and/or 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 3 is rejected under 35 U.S.C. 102(b) or 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Minkus et al., or Grimard, or Hirschman et al.

Minkus et al., or Hirschman et al. or Kimber et al. teach the claimed invention but fail to disclose eight pieces of the vane member, which are arranged at regular intervals and at central angles of 45 degrees.

At the time of the invention it would have been obvious for one of ordinary skill in the art to make the vane members out of eight pieces or more because this change in number of the vane members is a mere matter of design choice. This is a duplication of the components of the prior art device, and thus has been held in the courts as a "design consideration within the skill of the art." [See In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960).]

Response to Arguments

8. Applicant's arguments, see paper number 14, filed 10/21/03, with respect to the rejections of claims 1-4 under 102 and 103 Rejection of Grimard have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of Shanley et al. and Kimber et al.

9. With regards to Minkus et al., the applicant states that Minkus fails to disclose a pair of rings, a plurality of vanes. The examiner has added reference numbers to the rejection to show the applicant what the examiner is interpreting as the pair of rings, and vanes.

10. With regards to Hirschman et al. the applicant states that Hirschman et al. fails to state that the rings are equal to or slightly smaller than the syringe barrel. The examiner points the applicant to look at Figure 3D, and this seems to show that the plunger and ring members are either equal to or slightly smaller than the syringe barrel.

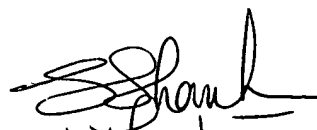
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew F DeSanto whose telephone number is 1-703-305-3292. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 1-703-308-3552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Matthew DeSanto
Art Unit 3763
February 3, 2004



S. Shank
J. Thank
Primary Examiner